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SECTION 4

Draft Section 4(f) Evaluation

4.1 Introduction

The U.S. Department of Transportation's Section 4(f) law (49 USC 303) states that federal funds may not be approved for projects that use land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless it is determined that there is no feasible and prudent alternative to the use of land from such properties, and the action includes all possible planning to minimize harm to the property resulting from such use.

Section 4(f) applies only to the actions of agencies within the U.S. Department of Transportation including FHWA. While other agencies may have an interest in Section 4(f), FHWA is responsible for Section 4(f) applicability determinations, evaluations, findings, and overall compliance for highway projects.

The information presented in this draft Section 4(f) evaluation is preliminary and subject to refinement in the Final EIS. FHWA will make a final Section 4(f) finding, in conjunction with approval of the Final EIS and Record of Decision.

Several resources in the Zoo Interchange study area require a Section 4(f) evaluation (**Exhibit 4-1**). FHWA's preliminary determination regarding Section 4(f) applicability to these resources is summarized below.

None of the resources have used funds from the Land and Water Conservation Fund Act (LWCF) as amended (16 USC 4601). Therefore, LWCF Section 6(f) requirements do not apply to the Zoo Interchange project.

Underwood Creek Parkway (includes Wil-O-Way Underwood Special Recreation Center and Oak Leaf Trail). Underwood Creek Parkway is owned by Milwaukee County. It consists primarily of open space and woodland but also contains a tot lot and two small buildings. The parkway has previously been determined eligible for the National Register of Historic Places (NRHP) under Criterion A (associated with events that have made a significant contribution to the broad patterns of our history).

The Wil-O-Way Underwood Special Recreation Center, operated by the county's Office for Persons with Disabilities, provides recreational activities for people with disabilities. In addition to the building, the center includes a picnic area, basketball court, and playground. The Oak Leaf Trail is a county-wide multi-use trail that runs throughout Underwood Creek Parkway.

Section 4(f) applies to the Underwood Creek Parkway, Wil-O-Way Underwood Special Recreation Center, and Oak Leaf Trail because these resources are publicly-owned parks, recreation areas, and/or significant historic sites.

EXHIBIT 4-1
Section 4(f) Resources

Forestry Science Center. The Forestry Science Center, located in the northeast quadrant of the Milwaukee County Grounds, is owned by DNR. Its purpose is to promote awareness of the benefits of sustainable forestry in Wisconsin. The property consists of a 50-acre mature upland forest classified by SEWRPC as a natural area. As the center continues to develop, additional non-forested land will be used for an education building and demonstration areas focusing on informing the public about forestry programs. Segregated forestry account funds have been allocated by the State Legislature for planning the project and to support program management, fundraising, exhibit design, staffing, and maintenance. In 2004, the land occupied by the center was rezoned from parkland to conservancy district, and the center was granted a conditional use.

Section 4(f) does not apply to the Forestry Science Center because its primary purpose is forestry education. Although secondary recreational activities such as hiking occur on the property, the center is not a park or recreation area.

Milwaukee County Zoo. The county owns the zoo, which is located on land that is part of the county's park system. According to its mission statement, the zoo is intended to inspire public understanding, support, and participation in global conservation of animal species and their environment. Funding for animal acquisitions, fundraising campaigns for building renovations and new exhibits, and financial support for research, conservation, and educational programs are through a public-private partnership with the Zoological Society of Milwaukee County.

Section 4(f) applies to the Milwaukee County Zoo because it is a publicly-owned park and recreational facility.

Chippewa Park. The park is owned by Milwaukee County. It contains a walking path, play areas, basketball court, and soccer fields.

Section 4(f) applies to Chippewa Park because it is a publicly-owned park and recreational facility.

Hank Aaron State Trail. The Hank Aaron State Trail (HAST) is a multi-use trail owned by the DNR that will eventually cross Milwaukee County from the lakefront near Maier Festival Park to the Oak Leaf Trail, just west of the Waukesha County line, approximately 375 feet south of Bluemound Road. The HAST provides a connection between Lake Michigan on the east and Miller Park on the west. The trail is open to walkers, runners, bicyclists, and skaters and provides an off-road asphalt path from Miller Park to the Sixth Street viaduct and the use of bike lanes and sidewalks to reach the lakefront.

In 2006, the DNR acquired 5.5 miles of former Canadian Pacific Railway rail corridor between Miller Park and the Milwaukee/Waukesha County line that would nearly double the length of the trail. The extended HAST would cross the Zoo Interchange study area at two locations. The trail would cross under the Zoo Interchange, approximately 550 feet north of Schlenger Avenue, and would also cross under I-94 on the west leg, at a skew, near 116th Street, approximately 0.5 mile west of the Highway 100 overpass. The trail would also be routed under Union Pacific's triple intersection Warren through-truss railroad bridge, located approximately 470 feet south of I-94 and 415 feet east of Highway 100. DNR is investigating the potential of a connection from the HAST under I-94 to the Milwaukee County Zoo just west of the core of the Zoo Interchange.

The HAST extension has been acquired and will be developed through the use of Knowles-Nelson Stewardship funds and FHWA Congestion Mitigation Air Quality (CMAQ) grants through WisDOT. The CMAQ grants require a 20 percent match by the DNR. This extended section of the HAST will be in fee title under the rail banking provisions of the 1983 National Trails System Act. This means that the corridor must be maintained so that it could be returned to use as a rail corridor, if needed, at some point in the future. WisDOT and the DNR developed a Memorandum of Understanding that lays out the details and responsibilities for the HAST's construction, maintenance, and detours during Zoo Interchange construction.

Section 4(f) does not apply to the HAST. The trail will be a multiple use, serving transportation needs as well as providing recreational opportunities. Additionally, the MOU states that, "DNR and DOT agree that the primary purpose of the HAST, from Miller Park to Oak Leaf Trail, will be for transportation rather than recreational use. As a result Section 4(f) requirements will not apply to this portion of the HAST."

West Allis Cross-Town Connector (planned trail). The Cross-Town Connector is a planned multi-use, east-west trail that would provide a safe and efficient means of commuting to work, school, shopping and area events, and that would also serve as a recreational resource. The trail is in the planning/design stage and its specific location has not yet been determined. SEWRPC's 2010 Regional Bicycle Plan shows a preliminary location with a crossing under I-894/US 45 along the Union Pacific Railroad line located between Greenfield Avenue and Lincoln Avenue. The proposed trail will extend across the entire City of West Allis and will provide connections with other trails. The Regional Bicycle Plan states that the planned trail will serve a significant portion of the population and will pass by several schools, some of the City's largest employers, several city buildings and gathering places, and five of the City's TIF districts. It will allow a safer regional connection by linking the Glacial Drumlin State Trail, the Waukesha County New Berlin Recreational Trail, and Milwaukee County's the Oak Leaf Trail and the HAST.

The 2009–2012 TIP includes two projects related to the Cross-Town Connector. Project #301 is defined as "construct a tunnel under the Union Pacific Railroad for Cross-Town Connector bike trail in the city of West Allis." The TIP identifies this project type as Environmental Enhancement and the funding source as CMAQ Improvement Program funds, slated for use in 2009. Project #302 is defined as "construction of the West Allis Cross-Town Connector bicycle/pedestrian trail from S 56th Street to S 124th Street along the We Energies right-of-way in the city of West Allis (5 miles)." The TIP identifies the project type as Environmental Enhancement and the funding source as a combination of FHWA and Federal Transit Administration funds to be used in 2009 and 2010. The City of West Allis Development Department has been awarded Transportation Enhancement funds to design and implement the trail, and as part of the 2005–2007 Budget Bill, the State Legislature allocated CMAQ funds for construction of a tunnel under the Union Pacific Railroad.

Section 4(f) does not apply to the planned West Allis Cross-Town Connector. As evidenced in the 2010 Regional Bicycle Plan and use of FHWA Transportation Enhancement and CMAQ funding, the trail will be a multiple use facility serving transportation needs as well as providing recreational opportunities. Further, the location of the trail has not yet been formally designated and will be jointly planned with the freeway improvements as the location of the trail is determined.

Honey Creek Parkway. Milwaukee County owns the parkway. Construction of the parkway started in 1933 as a public works project under the Works Progress Administration. The parkway has previously been determined eligible for the National Register under Criterion A (associated with events that have made a significant contribution to the broad patterns of our history), and the 84th Street Bridge over Honey Creek is eligible for the National Register under Criterion C (engineering and architecture).

Section 4(f) applies to the Honey Creek Parkway because it is a significant historic site.

Milwaukee County Parks Building. The building (formerly the Milwaukee County Home for Dependent Children) is listed on the National Register under Criterion A (associated with events that have made a significant contribution to the broad patterns of our history). The building is also listed as a Milwaukee County landmark and City of Wauwatosa local landmark.

Section 4(f) applies to the Milwaukee County Parks building because it is a significant historic site.

Eschweiler Buildings. The Eschweiler buildings are contributing elements in the Milwaukee County School of Agriculture and Domestic Economy Historic District. The District was listed on the National Register in 1998 under Criterion A (associated with events that have made a significant contribution to the broad patterns of our history) and Criterion C (engineering and architecture). The District is also a Milwaukee County landmark and City of Wauwatosa local landmark.

Section 4(f) applies to the Eschweiler Buildings because the Historic District is a significant historic site.

Union Pacific Railroad Truss Bridge. The Union Pacific Railroad truss bridge is eligible for the National Register under Criterion C (engineering and architecture) as an example of a triple intersection Warren through truss bridge.

Section 4(f) applies to the Union Pacific Railroad bridge because it is a significant historic structure.

Greenfield Avenue Presbyterian Church. As part of the Zoo Interchange study, the church has been determined eligible for the National Register under Criterion C (engineering and architecture), as an example of a late 19th and 20th Century English Colonial/Period Georgian Revival style of architecture.

Section 4(f) applies to the Greenfield Avenue Presbyterian Church because it is a significant historic structure.

The remainder of Section 4 discusses in detail the resources to which Section 4(f) is applicable.

4.2 Proposed Action

As discussed in Section 1, Purpose and Need Statement, the purpose of the proposed action is to address the study-area freeway system's deteriorated condition, obsolete design of the roadway and bridges, current and future capacity, and high crash rate while minimizing impacts to the natural and built environment. The proposed transportation improvements have the following objectives:

- Maintain a key link in the local, state, and national transportation network.
- Address the obsolete design of the study-area freeway system to decrease crashes.

- Replace deteriorating pavement and bridges.
- Accommodate future traffic volumes at an acceptable level of service.

The need for improvements to the Zoo Interchange corridor is demonstrated through a combination of factors, including regional land use and transportation planning growth forecasts, system linkage and route importance, existing and future traffic volumes, safety, and existing freeway conditions and deficiencies. (See Section 1 for more detailed information.)

Section 3.26, Recreational Resources/Public Use Lands, discusses publicly owned resources in the area of potential effect.

4.3 Section 4(f) Properties

The Modernization Alternatives would directly affect some Section 4(f) properties while other properties would experience freeways and ramps moved closer to the property, but no property acquisition would occur (**Table 4-1**). The Modernization Alternatives would affect the following Section 4(f) resources (**Exhibit 4-1**).

TABLE 4-1
Modernization Alternatives' Impacts on Section 4(f) Properties

Section 4(f) Property	New Right-of-Way Required (acres)	Other Impacts
Underwood Creek Parkway		
6-lane N1 and N3	0.10	Bridge over parkway would be 26 feet wider than existing bridge.
8-lane N1 and N3	0.24	Bridge over parkway would be 51 feet wider than existing bridge.
Wil-O-Way Special Underwood Recreation Center		
6-lane N1 and N3	0.47	Right-of-way would be 40 feet closer to playground (42 feet away) and 45 feet closer to building (168 feet away).
8-lane N1 and N3	0.53	Right-of-way would be 53 feet closer to playground (29 feet away) and 57 feet closer to building (156 feet away).
Oak Leaf Trail		
6-lane N1 and N3	0	Trail would be closed temporarily during construction; Bridge over trail and Underwood Creek Parkway would be 26 feet wider than existing bridge.
8-lane N1 and N3	0	Trail would be closed temporarily during construction; Bridge over trail and Underwood Creek Parkway would be 51 feet wider than existing bridge.
Milwaukee County Zoo		
All 6-lane alternatives	15.0	Acquires zoo maintenance facility, Zoofari Conference Center, and a portion of the overflow parking lot. Strip acquisition (either in fee or easement) from southwest corner of zoo. Potential visual impact from relocated electrical transmission lines also in southwest corner of zoo.

TABLE 4-1
Modernization Alternatives' Impacts on Section 4(f) Properties

Section 4(f) Property	New Right-of-Way Required (acres)	Other Impacts
All 8-lane alternatives	15.3	Acquires zoo maintenance facility, Zoofari Conference Center, and a portion of the overflow parking lot. Strip acquisition (either in fee or easement) from southwest corner of zoo. Potential visual impact from relocated electrical transmission lines also in southwest corner of zoo.
Chippewa Park		
6-lane W3	0.1	Acquires a 5- to 15-foot wide strip of land in the south east corner of the park.
8-lane W3	0.2	Acquires a 15- to 25-foot wide strip of land in the south east corner of the park; Mainline I-94 would be located approximately 21 feet closer (76 feet away) on the west end of the park.
Honey Creek Parkway		
6-lane E1; 8-lane E1; 6-lane E1/E3 hybrid; 8-lane E1/E3 hybrid	0	Approximately 4 acres of the parkway west of 84th Street may be converted to a 1- to 1.5-acre stormwater retention/detention pond.
Milwaukee County Parks Building		
6-lane N1; 8-lane N1	0	US 45 northbound entrance ramp would be 442 feet closer to the building (533 feet away); Watertown Plank Road would be moved 95 feet closer to the building (224 feet away).
6-lane N3; 8-lane N3	0	US 45 northbound entrance ramp would be 185 feet closer to the building (790 feet away); Watertown Plank Road would be moved 95 feet closer to the building (224 feet away).
Eschweiler Buildings		
6-lane N1; 8-lane N1	0	Swan Boulevard would be 3 feet closer to the nearest building (390 feet away).
6-lane N3; 8-lane N3	0	Swan Boulevard would be 78 feet closer to the nearest building (343 feet away).
Union Pacific Railroad Truss Bridge		
All alternatives	N/A	If rail line is moved 30 feet east or west, the truss bridge would be removed from service and require replacement.
Greenfield Avenue Presbyterian Church		
All alternatives	0	I-894/US 45 exit ramp would be 20 feet closer to church building (252 feet away).

4.3.1 Underwood Creek Parkway / Oak Leaf Trail / Wil-O-Way Underwood Special Recreation Center

Section 4(f) Property Description

Milwaukee County owns Underwood Creek Parkway, Wil-O-Way Underwood Special Recreation Center, and the Oak Leaf Trail.

Underwood Creek Parkway. Underwood Creek Parkway is a 196-acre parkway that generally follows the path of Underwood Creek from an area south of I-94 at Rainbow Park (116th and Walker Street), through the Milwaukee County Grounds to Swan Boulevard on the east/north (**Exhibit 4-1**). The parkway is generally contiguous with the exception of a portion between Bluemound Road and I-94. Underwood Creek Parkway crosses the Zoo Interchange study area in one location and is located near the study area at another location. On the north leg, the parkway crosses under US 45, approximately 0.4 mile north of Swan Boulevard. WisDOT owns the land under the US 45 bridge. This section of Underwood Creek Parkway is eligible for the National Register based on the history criterion. Along the west leg, a small section of the parkway is located north of the I-94 right-of-way at the Milwaukee/Waukesha County line and resumes south of I-94. However, unlike the north leg, Underwood Creek Parkway does not cross under I-94, and the historic boundary of Underwood Creek Parkway ends north of this area at Bluemound Road. Thus, this section of the parkway is not eligible for the National Register. The parkway consists of open space and wooded areas and contains one tot lot and two small park buildings.

Wil-O-Way Underwood Special Recreation Center. The Wil-O-Way Underwood Special Recreation Center is part of Underwood Creek Parkway, adjacent to US 45 between Swan Boulevard and Underwood Creek Parkway (**Exhibit 4-1**). The center is owned by Milwaukee County and operated by the County's Office for Persons with Disabilities. The Wil-O-Way Underwood Special Recreation Center hosts recreation activities designed for people with disabilities through the Wil-O-Way Recreation Program sponsored by Milwaukee County. Activities offered include arts, crafts, life skills, clubs, sports, and music. Goodwill Industries operates an adult day care program at the site, and Easter Seals operates a summer day camp for kids and adults with disabilities. UW-Extension offers master gardener classes, and UW-Milwaukee uses the grounds for camping. The center includes an accessible demonstration garden, zero entry pool, picnic area, basketball court, and wheelchair accessible playground and sandbox. The center has a room to rent with capacity for 150 people.

Oak Leaf Trail. Milwaukee County's Oak Leaf Trail, a county wide multi-use trail, is routed along Underwood Creek Parkway through the Zoo Interchange study area and crosses the study-area freeway system at two locations (**Exhibit 4-1**). On the north leg, the trail crosses under US 45 along the Underwood Creek Parkway. On the west leg, the trail approaches I-94 from the north on an off-road trail that connects with Underwood Creek Parkway, approximately 150 feet north of I-94. The trail crosses under I-94 along Underwood Creek Parkway. Currently, Milwaukee County has no plans that would provide additional Oak Leaf Trail crossings of the study-area freeway system.

Impacts on Section 4(f) Property

Underwood Creek Parkway. All Modernization Alternatives would require right-of-way acquisition along the north leg, where the Underwood Creek Parkway/Oak Leaf Trail crosses under US 45.

- *8-lane N1 Alternative, 8-lane N3 Alternative* – On the north leg, the 8-lane N1 and 8-lane N3 Alternatives would both acquire approximately 0.24 acre of new right-of-way from Underwood Creek Parkway on the east side of US 45 (see **Exhibit 4-2**). This area consists of approximately 0.1 percent of the total parkway land area. The width of the new bridge spanning Underwood Creek and the Underwood Creek Parkway, including the Oak Leaf Trail, would be approximately 175 feet wide, 51 feet wider than the existing 6-lane US 45 bridge over Underwood Creek.
- *6-lane N1 Alternative, 6-lane N3 Alternative* – On the north leg, the 6-lane N1 and 6-lane N3 Alternatives would acquire approximately 0.1 acre of new right-of-way from Underwood Creek Parkway on the east side of US 45. This area consists of approximately 0.05 percent of the total parkway land area. The new bridge crossing Underwood Creek and Underwood Creek Parkway, including the Oak Leaf Trail, would be approximately 150 feet wide for the 6-lane N1 Alternative. This would be 26 feet wider than the existing 6-lane bridge.

No new right-of-way would be acquired from Underwood Creek Parkway along the west leg. A potential stormwater detention pond may be constructed along Underwood Creek Parkway south of I-94 on the west leg. If the pond is built, Milwaukee County may maintain ownership of the land the pond lies within. Please refer to the text box on page 4-18 for more information regarding the stormwater detention pond.

Wil-O-Way Underwood Recreation Center. All Modernization Alternatives would impact the Wil-O-Way Underwood Special Recreation Center along the north leg.

- *8-lane N1 Alternative, 8-lane N3 Alternative* – The 8-lane N1 and 8-lane N3 Alternatives would acquire approximately 0.52 acre of land in the form of an approximately 35-foot wide by 650-foot long strip of land along the west side of the Wil-O-Way Underwood Special Recreation Center property (see **Exhibit 4-3**). This area consists of approximately 0.7 percent of the total Wil-O-Way land area and would not affect the outdoor recreation facilities. Additionally, the existing 6-lane US 45 is located 82 feet from the playground on the property and 213 feet from the Wil-O-Way building. Under the 8-lane N1 and N3 Alternatives, the new US 45 alignment would be approximately 53 feet closer to the playground and 57 feet closer to the Wil-O-Way building than the existing 6-lane US 45, making the new alignment approximately 29 feet from the playground and approximately 156 feet from the building.
- *6-lane N1 Alternative, 6-lane N3 Alternative* – The 6-lane N1 and 6-lane N3 Alternatives would require approximately 0.47 acre of land in the form of an approximately 20-foot wide by 1,000-foot long strip along the west side of the Wil-O-Way Underwood Recreation Center. This area consists of approximately 0.6 percent of the total Wil-O-Way land area and would not affect the outdoor recreation facilities. For the 6-lane N1 and N3 Alternatives, the new alignment would be approximately 40 feet closer to the playground and 45 feet closer to the building, making the new alignment approximately 42 feet from the playground and 168 feet from the building.

EXHIBIT 4-2

Eight-Lane N1 and N3 Alternatives' Impacts on Underwood Creek Parkway

EXHIBIT 4-3

Wil-O-Way Underwood Special Recreation Center

WisDOT met with the Milwaukee County Office for Persons with Disabilities, Goodwill Industries, Easter Seals, and UW-Extension in March 2009 to discuss potential impacts to Wil-O-Way. The primary concern was noise impacts to the outdoor recreation area, especially for autistic children and elderly for whom overstimulation from noise is a concern. Blind people, who rely more heavily on their sense of hearing, would find it more difficult to use the outdoor recreation areas.

Oak Leaf Trail. Under all alternatives, the Oak Leaf Trail crossings under US 45 and under I-94 would be closed temporarily during construction to accommodate freeway construction over the trail.

Avoidance Alternatives

Under the No-Build Alternative, no right-of-way would be acquired from Underwood Creek Parkway, the Oak Leaf Trail, or the Wil-O-Way Underwood Special Recreation Center, and US 45 and its entrance/exit ramps would not be moved any closer to the Section 4(f) resources. As discussed in Section 2, Alternatives Considered, the No-Build Alternative is not a reasonable course of action because it would not address safety concerns, the deteriorating pavement and bridges, and future traffic demand of the study-area freeway system.

Given that Section 4(f) resources are located throughout this section of the study corridor and adjacent to the existing freeway right-of-way, there are no prudent or feasible Modernization Alternatives that would avoid Underwood Creek Parkway, the Oak Leaf Trail, and the Wil-O-Way Underwood Recreation Center. Both Underwood Creek Parkway and US 45 are linear corridors perpendicular to each other; therefore, it would not be possible to avoid a crossing of these two corridors.

Measures to Minimize Harm

The Modernization Alternatives were designed to minimize the need to acquire new right-of-way. Measures to minimize harm to Underwood Creek Parkway and the Oak Leaf Trail include keeping the US 45 northbound exit ramp to Highway 100 as close to mainline US 45 as possible and providing a bridge over the Underwood Creek Parkway and Oak Leaf Trail, as opposed to an at-grade crossing, which would bisect the parkway and trail and not allow for a crossing for these facilities. Measures to minimize right-of-way acquisition from the Wil-O-Way Underwood Special Recreation Center will include retaining walls. Additionally, eliminating the interchange at Swan Boulevard minimizes impacts to the Wil-O-Way property. If a stormwater retention/detention pond is built in Underwood Creek Parkway on the west leg, south of I-94, WisDOT would provide landscaping around the pond.

Mitigation

Prior to reconstructing US 45, WisDOT will compensate Milwaukee County for the acquisition from the Underwood Creek Parkway/Oak Leaf Trail and Wil-O-Way Underwood Special Recreation Center.

WisDOT will coordinate the Milwaukee County Parks Department to develop appropriate mitigation along Underwood Creek Parkway. Mitigation may include improving the vegetation surrounding the bridge or working with the Parks Department to add elements to the US 45 bridge over the parkway that would better blend the bridge in with the surrounding natural environment.

Wil-O-Way does not meet TRANS 405 criteria for a noise wall. WisDOT will construct visual screening between US 45 and Wil-O-Way that may include a berm, a screening wall, or both. WisDOT will continue to work with Milwaukee County Parks Department and the Office for Persons with Disabilities during the design phase to develop appropriate mitigation.

Coordination

The project team discussed the project's potential impacts to these Section 4(f) resources with County Parks staff at the Technical Advisory Committee (TAC) meetings held in May, October, and November 2008, and January 2009. County Parks' staff expressed no major concerns regarding the project's potential impact to Underwood Parkway, the Oak Leaf Trail, and the Wil-O-Way Underwood Special Recreation Center. In November 2008 and March 2009, the project team also discussed the project's potential impacts to the Wil-O-Way facility with staff from Milwaukee County's Office for Persons with Disabilities.

4.3.2 Milwaukee County Zoo

The Milwaukee County Zoo is located in the northwest quadrant of the Zoo Interchange (**Exhibit 4-1**). US 45 borders the zoo to the east and I-94 borders the zoo to the south. The zoo's maintenance facility is connected to the zoo by an underpass under I-94 and is located in the southwest quadrant of the Zoo Interchange, directly south of the main zoo property.

Milwaukee County owns and administers the zoo, which occupies more than 200 acres of county park system parkland. The zoo was opened to the public at its present location on May 13, 1961. It is home to more than 1,700 mammals, birds, fish, amphibians, and reptiles with more than 350 species on exhibit. Along with the animals on exhibit and their living habitats, the site contains a large parking area, overflow parking area, Zoofari Conference Center, animal health center, conservation education center, a miniature train that travels around the zoo, administration offices, food areas, and gift shops, among other amenities. The zoo hosts many special events during the year, including concerts, Zoo a la Carte, and large group gatherings.

According to its mission statement, the zoo is intended to inspire public understanding, support, and participation in global conservation of animal species and their environment. Funding for animal acquisitions, fundraising campaigns for building renovations and new exhibits, and financial support for research, conservation and educational programs are done through a public-private partnership with the Zoological Society of Milwaukee County.

The zoo has its building maintenance shops in the Zoofari Conference Center on Bluemound Road. The zoo also uses the Zoofari Center to store food service supplies. The Zoofari Center's meeting room is rented approximately 3 days per week, and rental fees are used to maintain the building.

The zoo's maintenance facility is located south of I-94 in the southwest quadrant of the Zoo Interchange. The maintenance facility has a storage area for zoo maintenance vehicles and supplies, a fueling station for maintenance vehicles, and a greenhouse. The maintenance area is connected to the zoo via a road and a box culvert under I-94. The ditch on the north side of I-94 lies on zoo-owned property in the southwest corner of the zoo.

Impacts on Section 4(f) Property

All Modernization Alternatives would acquire the 5.56-acre zoo maintenance facility in the southwest quadrant of the existing Zoo Interchange, and approximately 8.9 acres along the eastern edge of the zoo property, including the Zoofari Conference Center and 3.6 acres of the 5.51-acre overflow parking lot along US 45 (**Exhibit 4-4**). The zoo's animal exhibits would not be directly affected by any of the Modernization Alternatives.

The loop ramp connecting westbound I-94 to the Greenfield Avenue exit off I-894/US 45 would be located approximately 11 feet from the southeast corner of the zoo. Further west, the 6-lane Modernization Alternatives would require grading for a ditch in an approximately 0.5 acre area on the southwest edge of the zoo, while the 8-lane Modernization Alternatives would require grading in an approximately 0.8-acre area (a 25-foot strip). Few, if any, trees would need to be cut down as a result of the grading.

In total, the Modernization Alternatives would acquire approximately 15 to 15.3 acres of zoo property for new right-of-way. Most of the 15 acres would be acquired in the fee, but the grading for the ditch in the southwest corner of the zoo could be accomplished through an easement.

Additionally, one or two overhead electrical transmission lines may be relocated to the north side of I-94, adjacent to the zoo. If one transmission line is located in this area, it would be built close to I-94 and would not require acquisition of zoo property. If two transmission lines are built in this area, some zoo property would be acquired and part of the vegetative screening between I-94 and the zoo would be permanently removed. As a result, I-94 and the transmission lines would likely be visible from the zoo's miniature train and possibly from some animal exhibits. The Milwaukee County Zoo expressed major concern over having any overhead electrical transmission lines in what is now the vegetative buffer area between I-94 and the zoo because of the visual impact of the towers and wires and loss of the buffer. WisDOT and ATC continue to explore alternatives that would avoid easements and visual impacts to the zoo.

Avoidance Alternatives

Under the No-Build Alternative, no right-of-way would be acquired from the Milwaukee County Zoo and I-94 and US 45 and their entrance/exit ramps would not be moved any closer to the zoo. As discussed in Section 2, Alternatives Considered, the No-Build Alternative is not a reasonable course of action because it would not address safety concerns, the existing deteriorating pavement and bridges, and future traffic demand of the existing study-area freeway system.

There are no prudent or feasible Build Alternatives that would avoid impacts to the Milwaukee County Zoo. A church, school, and apartment building are located east of US 45, across from the Zoofari Conference Center and the zoo's overflow parking lot. The Modernization Alternatives would require right-of-way acquisition from the church and school, and shifting the alignment further east to avoid the Zoofari Conference Center would likely require their relocation. On the south side of the zoo, the animal exhibits lie north of I-94, and the maintenance facility is south of I-94, so the Modernization Alternatives cannot avoid zoo property.

EXHIBIT 4-4
Zoo Property Impacts (Eight-Lane Alternatives)

Measures to Minimize Harm

The Modernization Alternatives were designed to impact as little right-of-way as possible. WisDOT and FHWA have minimized impacts to the Milwaukee County Zoo during the study phase by pulling in the core Zoo Interchange ramps as tight as possible and potentially using retaining walls. WisDOT and FHWA will continue to refine the alignment of Zoo Interchange core to further reduce impacts to the Milwaukee County Zoo, if possible.

Mitigation

Prior to reconstructing the Zoo Interchange, WisDOT and FHWA will compensate Milwaukee County for property acquired from the zoo. WisDOT and FHWA will replace the buildings acquired (Zoofari Conference Center and maintenance facility) and overflow parking lot. The maintenance facility may be relocated to an unused area in the northwest corner of the zoo property. Zoo officials identified this as a feasible location. The Zoofari Conference Center would also be replaced on zoo grounds.

If any of the vegetative buffer on the southwest side of the zoo is removed, mitigation will include screening walls or new landscaping. Additionally, WisDOT will mitigate the loss of parking from the overflow parking lot. This may include a parking structure.

Coordination

The project team met with Milwaukee County Zoo officials and the Milwaukee Zoological Society in January, May, July, and October 2008, February 2009, and March 2009. Zoo officials noted that appropriate mitigation appears to be available for the potential impacts to zoo property and facilities. If the zoo impacts are mitigated to the zoo management's satisfaction, they have no objections to the project. However, if overhead electrical transmission lines are located adjacent to the zoo, zoo management has concerns over the visual impact of the towers and wires as well as potential impacts to the zoo's electrical substation and well.

Additional meetings will be held during the alternatives analysis phase to further discuss potential mitigation measures.

4.3.3 Chippewa Park

Chippewa Park is a 10.52-acre Milwaukee County Park located north of I-94 and approximately 0.20 mile west of Highway 100 (**Exhibit 4-1**). The park is bordered by Park Hill Avenue on the north and I-94 on the south. Currently, Chippewa Park is approximately 40 feet (at its closest point) from the existing 6-lane I-94 on its east end. Chippewa Park contains a walking path, two children's play areas, one basketball court, and open areas with soccer goals.

Impacts on Section 4(f) Property

The 6-lane W-3 Modernization Alternative would acquire approximately 0.1 acre from Chippewa Park, which would come from a 5- to 15-foot strip of land in the southeast corner of the park, along the westbound I-94 entrance ramp from Highway 100. This is approximately one percent of Chippewa Park.

The 8-lane W-3 Modernization Alternative would acquire approximately 0.2 acre from Chippewa Park (**Exhibit 4-5**), which would come from a 15- to 25-foot strip of land in the southeast corner of the park, along the westbound I-94 entrance ramp from Highway 100.

EXHIBIT 4-5
Eight-Lane W3 Alternative Impacts on Chippewa Park

This is approximately 2 percent of Chippewa Park. At the west end of the park, mainline I-94 would be located approximately 21 feet closer to the park (76 feet away) than it is currently located.

Currently, the southeast corner of the park contains a wooded area that serves as a buffer between the park and I-94. The 6- and 8-lane W-3 Alternatives would remove some of the trees, but a wooded buffer between the park and I-94 would remain if this alternative is selected.

Avoidance Alternatives

Under the No-Build Alternative, no right-of-way would be acquired from Chippewa Park, and I-94 and its entrance/exit ramps would not be moved closer to the park. As discussed in Section 2, Alternatives Considered, the No-Build Alternative is not a reasonable course of action because it would not address safety concerns, the existing deteriorating pavement and bridges, and future traffic demand of the existing study-area freeway system.

Alternatives that avoid Chippewa Park would affect to the HAST alignment. Shifting the alignment of the I-94 westbound entrance ramp from Highway 100 to the south to avoid impacts to Chippewa Park would impact the HAST, an important transportation facility in the Zoo Interchange study area.

Measures to Minimize Harm

The Modernization Alternatives were designed to minimize the need to acquire new right-of-way from Chippewa Park. WisDOT and FHWA will continue to refine the alignment of I-94 and the Highway 100 entrance ramp to further reduce or eliminate impacts to Chippewa Park, if possible.

Mitigation

Prior to reconstructing US 45, WisDOT will compensate Milwaukee County for the acquisition from Chippewa Park. WisDOT will continue to work with Milwaukee County during the design phase to develop appropriate mitigation. If any vegetative buffer is removed, Chippewa Park mitigation will include screening walls or new landscaping.

Coordination

The project team discussed the project's potential impacts to the Milwaukee County Parks Building with County Parks' staff at the TAC meetings held in May, October, and November 2008.

4.3.4 Honey Creek Parkway

Honey Creek Parkway is a 94-acre parkway owned by Milwaukee County that follows Honey Creek. Honey Creek flows in a concrete-lined channel through much of the parkway, from I-94 on the south to Jacobus Park on the north (**Exhibit 4-1**). The parkway adjacent to I-94 contains no roadway, amenities, open space, or trails. The parkway was part of a master park and parkway plan developed in 1926 by the Milwaukee County Parks Commission. Construction of the parkway started in 1933 by the Works Progress Administration. Both Honey Creek Parkway and the 84th Street Bridge over Honey Creek, located approximately 700 feet north of I-94, are eligible for the National Register. Both the bridge and parkway are eligible based on Criterion A, history, with the bridge also eligible due to Criterion C, engineering.

Impacts on Section 4(f) Property

Four alternatives for reconstructing I-94 adjacent to Honey Creek Parkway are under consideration (6-lane E1, 8-lane E1, 6-lane E1/E3 hybrid, and 8-lane E1/E3 hybrid) (**Exhibit 4-6**). The 84th Street interchange with I-94 would be reconstructed under all these alternatives; however, none would directly affect Honey Creek Parkway. Additionally, the right-of-way acquisition for I-94 reconstruction will not affect the 84th Street bridge over Honey Creek.

Several acres of the parkway west of 84th Street may be converted to a stormwater retention/detention pond. If the pond is built, Milwaukee County may maintain ownership of the land the pond lies within. Please refer to the text box to the right for more information.

Avoidance Alternatives

Under the No-Build Alternative, no stormwater retention/detention pond would be needed in the Honey Creek Parkway. The Modernization Alternatives would require construction of a stormwater retention/detention pond along the east leg. Since open areas are scarce along the east leg, Honey Creek Parkway would be the best location for this pond. WisDOT will continue to look for alternative pond locations as well as other stormwater management options, such as in-line storage to avoid the need to construct a pond in Honey Creek Parkway.

Measures to Minimize Harm

If a stormwater retention/detention pond is built in Honey Creek Parkway, WisDOT would provide landscaping around the pond.

Mitigation

If a pond is built, WisDOT will continue to work with the Milwaukee County Parks Department during the design phase to develop appropriate mitigation for the impact. Initial discussion has focused on realigning Honey Creek and returning it to a more natural stream bed. The concrete-lined channel installed in the 1960s would be removed. Landscaping and fencing would be installed around the pond.

Coordination

The project team discussed the project's potential impacts to Honey Creek Parkway with County Parks' staff at the TAC meetings held in May, October, and November 2008 and during a meeting in January 2009. They had no major concerns in regards to the potential impacts to Honey Creek Parkway, and have concurred that mitigation measures could include restoring the channel to a more natural state.

Stormwater Retention/Detention Ponds

As part of the project, stormwater retention/detention ponds may be constructed in the Honey Creek Parkway on the east leg, the Underwood Creek Parkway along the west leg and on the County Grounds near the County Parks Building. The ponds would not be converted to new highway right-of-way, and the Milwaukee County Parks Department could retain ownership of the land.

For Honey Creek Parkway, up to 4 acres of the parkway, west of 84th Street, may be converted to a 1- to 1.5-acre stormwater retention/detention pond. To construct the pond, trees would be removed, and the concrete-lined stream bed would be realigned. The realigned stream would have a more natural stream bed than the existing concrete-lined channel, which was constructed in the 1960s, and would improve the creek's ability to support fish and wildlife. The pond would be dry at times and hold water for a period of time after rainfalls.

The Underwood Creek Parkway stormwater retention/detention pond along the west leg would be approximately 5 acres, located south of I-94. The stormwater retention/detention pond at the County Grounds near the Milwaukee County Parks Department building would be approximately 3 acres, located between the buildings and US 45.

The project team met with Milwaukee County Parks staff on November 13, 2008, to discuss the ponds. Milwaukee County Parks' staff was supportive of the concept of using existing park land for the stormwater detention ponds, pending further design and County Board approval.

EXHIBIT 4-6
Modernization Alternatives' Impacts on Honey Creek Parkway

4.3.5 Milwaukee County Parks Building

The former Milwaukee County Home for Dependent Children Administration Building (currently the Milwaukee County Parks System headquarters) is listed on the National Register based on Criterion A, social history. Constructed by Milwaukee County in 1898, the building is located approximately 0.25 mile east of US 45, 920 feet east of the existing entrance ramp from Watertown Plank Road to US 45, and approximately 336 feet north of Watertown Plank Road (**Exhibit 4-1**). This structure was listed on the National Register in 1999, was listed as a Milwaukee County Landmark in 1978, and is a City of Wauwatosa local landmark.

Impacts on Section 4(f) Property

- *6-lane N1 Alternative, 8-lane N1 Alternative* – Under the 6-lane and 8-lane N1 Modernization Alternatives, the existing US 45/Watertown Plank Road interchange would be reconstructed, and the northbound entrance ramp would be closer to the County Parks building. Under the N1 Modernization Alternatives, the on-ramp would be located approximately 533 feet west of the building (**Exhibit 4-7**). Watertown Plank Road would be reconstructed and realigned to the north to provide a safer and more efficient intersection with the freeway on/off ramps.
- *6-lane N3 Alternative, 8-lane N3 Alternative* – Similar to the N1 Modernization Alternatives, the 6-lane and 8-lane N3 Modernization Alternatives would involve the reconstruction of the US 45/Watertown Plank Road interchange, moving the northbound entrance ramp closer to the County Parks building. Under the N3 Modernization Alternatives, the entrance ramp would be located approximately 790 feet west of the County Parks building (**Exhibit 4-8**). Watertown Plank Road would be reconstructed and realigned to the north to provide safer and more efficient intersections with the freeway on/off ramps.

Under all four Modernization Alternatives, Watertown Plank Road would be moved approximately 95 feet closer to the building. The road would be about 224 feet south of the building rather than 319 feet as it is today. Several mature trees in front of the building would be removed. The building's driveway would be moved east but would still connect to the circle drive in front of the building's main entrance. Although Watertown Plank Road and the ramp to US 45 from Watertown Plank Road would be closer to the building than it is today, it would not affect the historic boundary of the building. The proposed improvements would not change the character of the property's use or physical features within the property's setting that contribute to its historic significance.

Avoidance Alternatives

The Modernization Alternatives avoid physical impacts to the building and historic boundary. Under all the Modernization Alternatives, the alignment of Watertown Plank Road would be shifted about 95 feet to the north, placing the road about 224 feet south of the building. Watertown Plank Road was shifted to the north to provide a better intersection alignment with the northbound US 45 entrance and exit ramps which provides for a safer intersection.

Mitigation

As a result of moving Watertown Plank Road approximately 95 feet closer to the building, WisDOT will design, in consultation with Milwaukee County (or future owner) and the State Historic Preservation Office (SHPO), and construct landscaping that will visually buffer the Milwaukee County Home for Dependent Children from Watertown Plank Road.

EXHIBIT 4-7

N1 Alternative Impacts on Milwaukee County Parks Building

EXHIBIT 4-8
N3 Alternative Impacts on Milwaukee County Parks Building

Coordination

The project team discussed the project's potential impacts to the Milwaukee County Parks Building with County Parks' staff at the TAC meetings held in May, October, and November 2008. The project team met with DPW in January 2009 to discuss the project's effects on the building. Although the building is occupied by the Parks Department, DPW has jurisdiction over the building.

4.3.6 Eschweiler Buildings

The Milwaukee County School of Agriculture and Domestic Economy Historic District (Eschweiler Buildings) is located approximately 575 feet east of US 45 and approximately 330 feet south of existing Swan Boulevard (**Exhibit 4-1**). This complex consists of four buildings constructed in 1912, all owned by Milwaukee County. The buildings were formerly used as a school and most recently as offices, but are currently vacant. Access to the buildings was from Watertown Plank Road until 2008 when Milwaukee County removed the only vehicle access. The district was listed in the National Register in 1998 and is also a Milwaukee County and City of Wauwatosa landmark. The historical significance of this district is based on Criterion A (education) and Criterion C (architecture).

UWM may purchase land, including these buildings, from Milwaukee County to develop a new campus. Part of the attractiveness of the site for UWM is its proximity to US 45.

Impacts on Section 4(f) Property

The Modernization Alternatives would not result in a change of property use. The existing roadway west of the buildings may be approximately 80 feet closer than it is today. Reconstructing the study-area freeway system would not result in a change in their current use nor preclude their redevelopment into a university campus. The proposed improvements would not change the character of the property's use or physical features within the property's setting that contribute to its historic significance:

- *6-lane and 8-lane N1 Alternative* – Under the N1 Modernization Alternative, the Swan Boulevard bridge over US 45 would be reconstructed, as would the Swan Boulevard connection to Watertown Plank Road (**Exhibit 4-9**). Swan Boulevard would be reconstructed in roughly the same footprint as its existing alignment. At its closest point, the reconstructed Swan Boulevard would be approximately 390 feet away from the closest building on the property, 3 feet closer than the existing distance in this location.
- *6-lane and 8-lane N3 Alternative* – Under the N3 Modernization Alternative, the Swan Boulevard bridge over US 45 would be reconstructed, as would the Swan Boulevard connection to Watertown Plank Road (**Exhibit 4-10**). The existing Swan Boulevard-Watertown Plank connector road is 421 feet west of the closest of the four buildings; after reconstruction, it would be approximately 343 feet away. Swan Boulevard would also be reconstructed on the north side of the buildings, but would remain in roughly its same footprint.

EXHIBIT 4-9

Eight-Lane N1 Alternative Impacts on Eschweiler Buildings

EXHIBIT 4-10
Eight-Lane N3 Alternative Impacts on Eschweiler Buildings

Avoidance Alternatives

The Modernization Alternatives avoid physical impacts to the building and historic boundary.

Coordination

The project team discussed the project's potential impacts to the Eschweiler Buildings with County DPW staff at meetings held in November 2008 and January 2009.

4.3.7 Union Pacific Railroad Truss Bridge

The Union Pacific Railroad's triple intersection Warren through truss bridge carries a Union Pacific rail line over a former Canadian Pacific Railway line (to be converted to DNR's HAST) just south of I-94 (**Exhibit 4-1**). The bridge is eligible for the National Register as an example of the triple intersection Warren through truss bridge that integrates an additional through-plate girder concept between the deck beams that are tied to the lower chord. The bridge is located approximately 470 feet south of a modern railroad bridge over I-94 near Highway 100.

Impacts on Section 4(f) Property

Under all Modernization Alternatives, the Union Pacific's modern railroad bridge over I-94 would be replaced by a new, longer bridge to accommodate the Zoo Interchange reconstruction (**Exhibit 4-11**). The Union Pacific rail line near I-94 may remain in its existing alignment or be realigned approximately 30 feet to the east or west of its current location. If the tracks remain on their existing alignment, the truss bridge would likely remain in service. However, if the railroad alignment is shifted, the truss bridge would likely be removed from service, and replaced with a new structure. The railroad, as owner of the bridge, would have the option to keep the bridge in place or demolish the bridge. Even if the bridge remains in place but out of service, it would likely not be maintained, so an adverse effect would occur.

Avoidance Alternatives

Under the No-Build Alternative, no new rail bridge would be constructed over I-94. There would be no need to realign the tracks, and the truss bridge would remain in place and in service. As discussed in Section 2, Alternatives Considered, the No-Build Alternative is not a reasonable course of action because it would not address safety concerns, the existing deteriorating pavement and bridges, and future traffic demand of the existing study-area freeway system.

WisDOT is working with Union Pacific Railroad to determine if keeping the tracks in their current alignment is feasible and prudent under the Modernization Alternatives.

Mitigation

If the rail line is realigned and the truss bridge taken out of service, WisDOT and FHWA will work with the SHPO and the Union Pacific Railroad to develop appropriate mitigation measures.

EXHIBIT 4-11
W3 Alternatives Impacts on Union Pacific Truss Bridge

Coordination

The project team discussed the project's potential impacts to the bridge at meetings with the Union Pacific railroad and their representatives in January, September, and December 2008. In April 2009, Union Pacific Railroad said that they do not have concerns over potential removal of the bridge.

4.3.8 Greenfield Avenue Presbyterian Church

The Greenfield Avenue Presbyterian Church, built in 1953, is eligible for the National Register under Criterion C, architecture, with regard to Criterion Consideration G: Properties that have achieved their significance within the last 50 years. The church is an example of the late 19th and 20th century revivals of the English colonial/period Georgian Revival style of architecture. The church is located on 97th Street, approximately 700 feet east of mainline I-894/USH 45 and 270 feet east of the exit ramp to Greenfield Avenue (**Exhibit 4-1**). The church is approximately 375 feet south of Greenfield Avenue. A parking lot, street, and some foliage are located between the church and I-894/US 45. Aside from the freeway and commercial buildings along Greenfield Avenue, the church is in a residential area.

Impacts on Section 4(f) Property

Under all Modernization Alternatives, I-894/US 45 would be reconstructed and potentially widened, including the existing exit/entrance ramps to/from Greenfield Avenue (**Exhibit 4-12**). The exit ramp to Greenfield Avenue would be approximately 20 feet closer to the church than it is today (250 feet rather 270 feet). Greenfield Avenue would be reconstructed 500 feet east of its interchange with I-894/US 45. The project would not result in a change in use of the church or its property. The proposed undertaking would not change the character of the property's use, physical features, or setting that contributes to its historic significance.

Avoidance Alternatives

The Modernization Alternatives avoid physical impacts to the church building and historic boundary.

Coordination

The project team discussed the project's potential impacts to the church at a meeting with a church representative in November 2008. The church representative concurred that the project would not have an adverse effect on the church.

EXHIBIT 4-12
Modernization Alternatives' Impacts on Greenfield Avenue Presbyterian Church